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STATE OF COLORADO



1961

ANNUAL REPORT

DEPARTMENT OF NATURAL RESOURCES

COAL MINE INSPECTION DIVISION

STATE OF COLORADO



1961

ANNUAL REPORT

DEPARTMENT OF NATURAL RESOURCES

COAL MINE INSPECTION DIVISION

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LETTER OF TRANSMITTAL

April 1, 1962

To His Excellency
Steve McNichols
Governor of Colorado

Sir:

It is an honor to submit to you the Annual Report of the State Coal Mine Inspection Division, Department of Natural Resources of Colorado, for the year ending December 31, 1961.

Respectfully,

THOMAS ALLEN
Chief Inspector of Coal Mines

EDWARD L. CLARK
Director of Natural Resources



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OBITUARY

FRED W. WHITESIDE, EM

Fred W. Whiteside of 356 Lafayette Street, Denver, Colorado, passed away on September 10, 1961, after a prolonged illness.

Mr. Whiteside was born in Chicago in 1875 and moved to Denver in 1879. He was the first engineering graduate of the University of Colorado, in 1897.

During the following years he was employed in an engineering capacity with the Denver Union Water Company, for the D&RG, the C. F. & I. Corporation and chief engineer for the Victor-American Fuel Company for 35 years.

Mr. Whiteside served as engineer with the State Board of Examiners for Coal Mine Officials for over 30 years and was secretary and treasurer of the Rocky Mountain Coal Mining Institute for 40 years.

He is survived by his wife Augusta, a daughter, Mrs. Mildred Gillaspy of San Francisco, Calif., a son, Fred, of Bloomfield, Conn., three grandchildren and three great-grandchildren.

PERSONNEL OF DEPARTMENT

CHIEF COAL MINE INSPECTOR - THOMAS ALLEN

Office - 318 State Services Building
Denver 3, Colorado
Telephone - AC 2-9911
Ext. 2616
Home - 1285 Albion Street
Denver 20
Telephone - FR 7-5572

DEPUTY INSPECTORS - (Counties within each district)

Dist. #1-DONALD HASKE - 4561 Perry St., Denver 12

Telephone - GRand 7-9295

(El Paso, Fremont, Jackson and Weld)

Dist. #2-OSCAR T. RICE - 919 Tascosa, Trinidad

Telephone - VICTor 6-2634

(Huerfano and Las Animas)

Dist. #3-GRANT McCONNELL - P. O. Box 385, New Castle

Telephone - New Castle 984-2370

(Garfield, Moffat, Pitkin, Rio Blanco and Routt)

Dist. #4-JOHN J. RODDY - 1404 White Avenue, Grand Junction

Telephone - CHapel 2-5915

(Delta, Gunnison, La Plata, Mesa and Montrose)

GENERAL OFFICE

Sr. Administrative Assistant	Veda Burford 720 Jersey St., Denver 20 FRemont 7-4317
Sr. Account Clerk	Evelyn Miller 3357 W. 36th Avenue
Clerk-Stenographer	JoAnne Yurko 5502 Tejon Street
Clerk-Typist	Marjorie A. Thompson 1203 So. High Street

BOARD OF EXAMINERS FOR COAL MINE OFFICIALS

Thomas Allen, Chief Inspector - Denver 3

Fred W. Whiteside, E. M., Secretary - Deceased 9-10-61

Niles E. Grosvenor, E. M. Secretary, Golden-Appointed 12-8-61

Walter E. Gert, P. O. Box 31, Meeker - Resigned 1-24-61

Ralph Chatfield, Carbondale - Appointed 6-17-61

Frank Kolar, Jr., 2028 W. 9th Street, Longmont

Mathew J. Mlakar, P. O. Box 271, Somerset

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INTRODUCTORY COMMENTS

The production of coal in 1961 reached the peak within the last 10 years, with an increase of 76,120 tons over 1960. This increase is attributed to the expansive demand for electric power and the additional amount of coal used at the steel mills of the C. F. & I. Corporation in Pueblo, and coal shipped to the Columbia-Geneva Division of the U.S. Steel Corporation at Dragerton, Utah.

Recent publicity of future developments in Northwestern Colorado insures a substantial increase in the production of coal, within the very near future.

The five fatalities in 1961 occurred at the frequency rates of 1.35 per million tons of coal produced and 2.25 per million man-hours of exposure. There was one man killed in each 332 men employed. The number of compensable accidents decreased, but one man in each 21 employed was injured. A decrease in accidents from falls of roof and face.

The inspectors of this department made a record number of inspections of almost 50% more than the minimum required, and continuous check inspections for compliance of recommendations made. Mines failing to correct unsafe conditions are closed for production until released by the department.

The State Coal Mining Laws require that surface caves and shafts into abandoned mines shall be fenced or filled in. In the opinion of the Chief Inspector, fencing is insufficient, and such openings must be filled in to permanently eliminate any danger to persons or stock.

During the past year there have been over 36 old openings filled in by bulldozers or other means. The inspectors have spent much time in locating owners of such properties, and some of the county commissioners have assisted in labor and equipment necessary to do this work. There are many more throughout the state, which will receive attention when located.

The State Legislature appropriated \$1,500 to be used for platting maps that will show the extent of underground workings of all abandoned and active coal mines in the state. The work will extend the maps from 1938 to date. This is highly important for the

information of the numerous agencies that weekly consult the records of this department for extensive future developments that include housing projects and industrial plants.

The Columbia-Geneva Division of the U.S. Steel Corporation purchased the Somerset Mine in Gunnison County from the Minerals Development Corporation, the latter part of 1960, the change in operation effective January 1, 1961. A. M. Morrison is superintendent of the mine.

The C. F. & I. Corporation closed and abandoned the Frederick Mine in Las Animas County in May, 1961, with no production after December, 1960. This mine was in operation from 1907, producing 20,522,962 tons of coal within 54 consecutive years. The Frederick covered the largest underground area of any mine in the State. It was among the first mines in the State to rock dust throughout the mine, and to employ the use of bolts as a roof control. The safety record of the employees was above average and this mine was highest on the Honor Roll for seven consecutive years.

AMENDMENTS TO THE COAL MINING LAWS - Forty-second General Assembly. Section 92 (c) - Surface structures within 100 feet of mine openings to be of fireproof construction, or fire doors shall be erected.

Section 131 - Abolishment of "Cash Fund" - This department to be entirely supported by the General Fund, into which all collections of money are deposited. Licenses to be issued by this office; and stipulated that no license is to be issued until all delinquent amounts are paid in full.

RECIPROCAL AGREEMENT WITH THE STATE OF UTAH - After many years of effort, the State Industrial Commission of Utah approved an exchange in recognition of certificates of equal rating with the State of Colorado. This became effective December 18, 1961. The other reciprocal states at this time are Wyoming and New Mexico.

SUMMARY OF FIELD WORK

Number of Inspections	755
Number of Check Inspections	153
Examinations for Shot Firers	33
Serious accidents investigated	13
Complaints investigated	29
Mines closed for legal violations & non-compliance with recommendations made	20
Suspension of officials certificates	8

HONOR ROLL FOR 1961 - 50,000 or more man-hours per injury

<u>Mine</u>	<u>Company</u>	<u>County</u>	<u>Fatal</u>	<u>Non-Fatal</u>	<u>Man-Hours Per Injury</u>
Washington	Clayton Coal	Weld		0	104,324
Allen	C. F. & I. Corp.	Las A.	1	7	94,800
Bo. Valley #3	Bo. Valley Coal	Weld		1	87,933
Osage Strip	P. & M. Coal	Routt		1	57,939
Eagle	Imperial Coal	Weld		2	53,300
Sterling	McNeil Coal Corp.	Weld		0	50,215

HONORABLE MENTION - 20,000 to 50,000 man-hours per injury

Dutch Creek	Mid-Cont. Coal&Coke	Pitkin	1	2	47,092
Lincoln	Clayton Coal	Weld		1	46,104
Somerset	ColumbiaGeneva Steel	Gunnison	2	2	36,324
ThompCreek #2	ThompCrk. Coal&Coke	Pitkin		1	35,096
Pioneer Can#2	The Corley Co.	Fremont		1	33,925
Edna Strip	Edna Coal	Routt		2	24,861
Calumet #2	Delcarbon Coal	Huerfano		1	24,104
Thomp. Creek#1	Thomp.Crk. Coal&Coke	Pitkin		7	21,631
Imperial	Imperial Coal	Weld		0	21,508
King	Juanita Coal & Coke	Delta		1	20,606

FINANCIAL STATEMENT FOR THE CALENDAR YEAR

RECEIPTS

Coal Tax	\$24,491.97	
License Fees	4,460.00	
Misc.-Sale of Law Books & Old Equipment	60.50	
General Fund Appropriation	<u>38,043.07</u>	
Total		\$67,055.54

EXPENDITURES

Salaries - Field & Office	55,020.14	
Travel - Hotel, Meals, Gasoline, etc.	6,311.80	
Workmen's Compensation	1,778.00	
Equipment - Field & Office	551.57	
Telephone & Telegraph	1,497.30	
Supplies - Field & Office	702.58	
Postage & Express	366.75	
Car Insurance, Surety Bonds	274.35	
Printing	243.20	
Special Investigations & Transcripts	118.45	
Blue Prints, Subscriptions & Storage	111.13	
Maintenance & Repair of Equipment	<u>80.27</u>	
Total		\$67,055.54

GENERAL SUMMARY OF THE COLORADO COAL STATISTICS FOR 1961

MINES REPORTING PRODUCTION	-	Mechanized	84,	Pick	27,	Strip	7
PRODUCTION IN SHORT TONS				(Increase	-	76, 120)	3, 700, 692

GRADES

Bituminous	2, 797, 218	Mine Run	1, 002, 997				
Sub-Bituminous	903, 474	Lump	177, 241	Pea		857, 080	
		Nut	61, 398	Slack		1, 463, 677	
		Egg	109, 742	Miscellaneous		28, 557	

TONNAGE BY MINING METHODS

MINED BY	-	Electric undercutting machines	1, 031, 066
		Solid pick	235, 747

LOADED BY - Mechanically, using no or very little hand labor
 Hand-loaded onto mechanical loaders
 Hand-loaded into pit cars

CUT AND LOADED BY CONTINUOUS MINING MACHINES

STRIPPED - OPEN PITS	1, 913, 462
	520, 417

SHIPMENT AND DISPOSAL

Shipped by rail	2, 613, 843	Direct to Power Plants by Conveyors	
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Shipped by truck	976, 512	Cameo to Public Service	103, 874
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Used for power and heat at the mines	6, 463	Shipped out of State	818, 822
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MEN EMPLOYED (Average number)	Underground	1, 223	Surface	287	Strips	147
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DAYS WORKED (Average number per mine)						
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DAILY PRODUCTION PER MINER

DAILY CAPACITY OF ALL MINES (as reported)	
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UNDERGROUND MECHANICAL & ELECTRIC EQUIPMENT - See pages 22 & 23

MINING MACHINERY -	Electric Undercutting	181	Drills	259
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	Electric Shearing	1	Stopers	8
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	Compressed Air Drills	29	Combination	20
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MECHANICAL LOADERS -	Shakers	103	Mainline conveyors	29
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	Mobile	69	Chain conveyors	27
--	--------	----	-----------------	----

			Portable conveyors	3
--	--	--	--------------------	---

CONTINUOUS MINING MACHINES -	Undercutting and loading	-	24
------------------------------	--------------------------	---	----

			1, 657
			167
			13.4
			27, 110

HAULAGE MACHINERY - Locomotives: Electric trolley 76 Electric battery 37
 Hoists : Electric 109
 Shuttle cars 110

LAMPS: Flame safety 436 Electric cap 2,487

STRIP MACHINERY & EQUIPMENT

Bulldozers 12	Drag lines 6	Motor graders 1
Caterpillars 7	Jackhammers 8	Scarifiers 4
Compressors 12	Drills 8	Tractors 7
Loaders 5	Power shovels 5	Trucks 19

<u>EXPLOSIVES (Pounds)</u>	<u>Permissible</u>	<u>Dynamite</u>	<u>Cardox</u>	<u>Airdox</u>	<u>Others</u>	<u>Total</u>
Underground Mines	451,842	15	60 mines	2 mines	297,538	451,857
Strip Mines	366,800	5,000			297,538	669,338
	818,642	5,015			297,538	1,121,195

SURFACE & MISCELLANEOUS

Hoists: Gas	13	Steam	2	Electric	53
Tipples: Gravity	43	Mechanical	63		
Ventilation fans: Exhaust	69	Force	27		
Coal washing plants	4	Steam Plants	7	Box car loaders	28
Pumps: Electric	195	Compressed air	6	Bath house	21 Showers 291
Air Compressors: Underground	33	Surface	17	Rock dusting machines	49
Telephones	166			Battery charging stations	18
Gravity Planes	1			Aerial trams	1

SAFETY EQUIPMENT

Self-rescuers	452	Oxygen breathing apparatus: McCaa	27
Inhalators	47	Chemox	24

GENERAL INFORMATION (As Reported)

Shaft Mines	5	Rock slopes	16	Rock tunnels	5	Drifts	66	Coal slopes	41
Number of mines: On railroads	19	Roof-bolted	9						
Tons of coal chemically treated	181,487	Tons of washed coal	14,189						

ACCIDENTS - See page 24

Total number:	Fatalities	5
	Non-Fatals	76

DIRECTORY

COMPANY	ADDRESS	MINE	ADDRESS	COUNTY
Alvidrez & Sons	Florence	Black Knight #3	Same	Fremont
Annex Coal	"	Annex #2	"	"
Aragon, Ricardo F.	Trinidad	Anchor #2	"	Las A.
Baldy Coal	"	Baldy #2	"	" "
Barstow, Aul & Peterson	Palisade	Blue Flame	"	Mesa
Bear Coal	Somerset	Bear	Same	Gunnison
Beer Coal & Const., Inc.	Florence	Beer Strip	"	Fremont
Bendetti, H. & L.	Glenwood Spgs.	New South Canyon	"	Garfield
Berwind Canyon Coal	Trinidad	Berwind Canyon	"	Las A.
Bisulco Coal	Aguilar	Bisulco	"	" "
Black Beauty Coal	Walsenburg	Black Beauty	Same	Huerfano
Blue Blaze Coal	"	Black Hawk #1	"	"
Blue Ribbon Coal	Cedaredge	Blue Ribbon	"	Delta
Boulder Valley Coal	Denver (2)	Boulder Valley #3	Dacono	Weld
Bowman's Coal	Trinidad	Bowman's	Same	Las A.
Brodhead Coal	Trinidad	Brodhead #4-A	Same	Las A.
Brooks, Ira T.	Cedaredge	Green Valley #2	"	Delta
C. F. & I. Corp.	Pueblo	Allen, E. & W. Port.	Weston	Las A.
Caldirola Fuel	Florence	Caldirola #2	Same	Fremont
Can. Blk. Diam. Coal	"	Can. Blk. Diam.	"	"
Canon National Coal	Florence	Canon National	Same	Fremont
Canon Oak Creek Coal	Canon City	Canon Oak Creek	"	"
Cedar Canon Coal	Florence	Cedar Canon	"	"
Champion Coal Mng.	Somerset	Hawk's Nest	"	Gunnison
Clayton Coal	Denver (2)	Lincoln	Erie	Weld
Clayton Coal	Denver (2)	Washington	Erie	Weld
Coal Crk. Can. Mng.	Florence	Coal Creek Canon	Same	Fremont
Colowyo Coal	Denver (2)	Red Wing	Craig	Moffat
Columbia-Geneva Div.	Dragerton, Utah	Somerset	Somerset	Gunnison
U. S. Steel Corp.	San Francisco, Cal.			

RAILROADS - OPENINGS - SEAMS

Superintendent	R. R.	Daily Cap.	OPENINGS				SEAM		
			Shaft Depth	Rock	Rock	Drift	Ft.	In.	Pitch % ^o
				Slope	Tunnel				
				Length					
C. Alvidrez		20				Yes	5		3 ^o
Nickie Rocchio		20				Yes	6		
R. F. Aragon		3					5	6	
D. A. Johnson		6				Yes	5	6	
Willis S. Barstow		20				Yes	5	6	3%
William A. Bear	D&RG	500			300		8		
Lloyd J. Beer		150		STRIP			4		7%
Henry Bendetti		15			30		5		57 ^o
Alfred Griego		10				Yes	4	10	
Sam Gonzales		6				Yes	4		
Mariano Pesina		6				Yes	4		2%
Albert Amiday		10					2	6	3 ^o
Ed Marah		50				Yes	6		5%
Thomas Harris	U. P.	1,000	245				7		
John Bowman		3				Yes	2	10	
Sam Vasquez		15				Yes	3	10	3%
Ira T. Brooks		50		200			6		3%
L. W. Ingles	C&W	5,000		1,578 (E)		Yes (W)	5		2-30%
Fred Del Duca		50		480			4	8	5%
Frank Yellico		75		400			6	7	6%
Raymond Jermance		100					5		
J. E. Griffin		5				Yes	4		18 ^o
Charles Farrington		100				Yes	6		2%
Ralph Audin	D&RG	300		300			7		2%
William Ferguson	U. P.	1,500		1,800			9		
William Ferguson	U. P.	1,200	430				9		
John A. Javernick		50				Yes	4	6	5 ^o
J. Arthur Haske		900		125			23		3-6%
						(B-22			
A. M. Morrison		996				(C- 7			4-7%

COMPANY	ADDRESS	MINE	ADDRESS	COUNTY
Corley Co., The	Colorado Spgs.	Corley Strip	Florence	Fremont
Corley Co., The	Colorado Spgs.	Pioneer Canon #2	"	"
de la Rosa, Lorenzo	Trinidad	Berwind #4	Same	Las A.
Delcarbon Coal	Walsenburg	Calumet #2	"	Huerfano
Di Marco, L., & Alverado	Trinidad	Starkville #7	"	Las A.
Double Dick Coal	Florence	Double Dick	Same	Fremont
Dry Creek Coal	Hayden	Cardinal	"	Routt
Eagle Head Coal	Grand Jct.	McGinley	"	Mesa
Edna Coal	Denver (2)	Navajo Strip	Nucla	Montrose
Ellis Coal	Somerset	Black Beauty	Same	Gunnison
Emmons Bros. Coal	Paonia	Emmons	Same	Delta
Fogg, Lyndon H.	Cedaredge	Red Canon #1	"	Delta
Fontanari, R. & A.	Clifton	Go-Boy	"	Mesa
Four Mile Coal	Glenwood Spgs.	Four Mile	"	Garfield
Franceville Coal	Colorado Spgs.	Franceville Strip	"	El Paso
Golden Quality Coal	Canon City	Golden Qual. #4	Same	Fremont
Grey Creek Coal	Trinidad	Grey Creek #4	"	Las A.
Guadagnoli Bros. C.	"	Engleville	"	" "
Haas, William, Jr.	Rifle	Black Raven	"	Garfield
Hay Gulch Coal	Hesperus	Hay Gulch #2	"	La Plata
Hayden Coal	Hayden	Babson	Same	Routt
Hesperus Coal	Hesperus	Hesperus #4	"	La Plata
Hunt, William M.	Durango	Burnwell #1	"	" "
Imperial Coal	Denver (2)	Eagle	Erie	Weld
Imperial Coal	" "	Imperial	"	"
Iuppa, Albert & Son	Trinidad	Starkville #4	Same	Las A.
Jenkins & Mathis C.	Meeker	Rienau	"	Rio Blanco
Joe's Coal	Raton, N. M.	Delagua #4	Delagua	Las A.
Juanita Coal & Coke	Bowie	King	"	Delta
Kerr Coal	Cameo	Cameo	"	Mesa

Superintendent	R. R.	Daily Cap.	OPENINGS				SEAM		
			Shaft	Rock	Rock	Drift	Ft.	In.	Pitch ° - ′
			Depth	Slope	Tunnel				
			Length						
Thomas E. Shelnutt		200	STRIP				3	6	8%
Thomas E. Shelnutt		600				Yes	8		8%
L. de la Rosa		9				Yes	4	6	
George Sudar	D&RG	100	700				4	2	4%
L. DiMarco		10				Yes	4		
Joe Rohar		100	400				5	11	
E. R. Todd		400				Yes	12		7%
B. A. Nichols		20				Yes	7		
A. R. Ross		500	STRIP				5	6	5%
Ellis Axelson		85				Yes	10	6	
John T. Emmons		40				Yes	7	6	6%
Lyndon H. Fogg		30	350				4	6	6%
R. Fontanari		10					4	6	5%
C. A. Betz		20	350				7-8		40°
Lee Gordley		50	STRIP				6	6	
Dominic Carestia		65				Yes	6	6	3%
Lawrence Rivera		8				Yes	3	4	
Chas. Guadangoli		7				Yes	9		
Wm. Haas, Jr.		15				Yes	22		5-7%
Wm. C. Hunt		10				Yes	6		3°
S. J. Prewitt		20				Yes	10	6	14%
Joe De Luzio		10				Yes	9	1	4%
Oren A. Pilcher		20				Yes	6	6	
Frank Kolar	U. P.	1,500	370				9		1½%
Frank Kolar	U. P.	900	300				10	6	
Albert Iuppa, Jr.		36	300				5		
Wm. Jenkins, Jr.		30				Yes	20		18°
Joe Sonchar, Jr.		30					5	6	
Robert F. Bowie	D&RG	300					15		7%
H. J. Kissell	D&RG	500			950	Yes	6		3°

COMPANY	ADDRESS	MINE	ADDRESS	COUNTY
King Coal	Hesperus	King	Same	La Plata
Liberty Mining	Canon City	Can. Liberty #3	"	Fremont
Lobato, Fidel	Durango	Blue Flame	"	La Plata
Major Coal	Walsenburg	Major #3	"	Huerfano
Major Coal	"	Pioneer	"	"
Martinez, Albert	Cokedale	Martinez	Same	Las A.
Maschio Coal	Raton, N. M.	Hastings #3	Hastings	" "
Mathews, John	Oak Creek	Johnnie's	Same	Routt
McNeil Coal Corp.	Denver (2)	Sterling	Dacono	Weld
Mid-Continent C. & C.	Carbondale	Dutch Creek	Same	Pitkin
Montoya Coal	Trinidad	Aguilar-Imperial	Same	Las A.
Montoya, Ben & Sam	Valdez	Montoya #3	"	" "
Morning Glory Coal	Walsenburg	Morning Glory	"	Huerfano
Moschetti, N. J.	Canon City	Canon Zenith #2	"	Fremont
New Castle Coal	New Castle	New Castle-Vulcan	"	Garfield
North Fork Coal	Denver (2)	Edwards	Somerset	Gunnison
Nu-Mine Coal	Gunnison	Nu-Mine #2	Same	"
P & M Coal Mng.	Steamboat Spgs.	Edna Strip	Oak Creek	Routt
P & M Coal Mng.	" "	Osage Strip	Same	"
Pantazes, Pete	Aguilar	Prosperity #2	"	Las A.
Paterson, Mack R.	Fruita	Hy-Grade	Same	Mesa
Peacock Coal	Durango	Peacock	"	La Plata
Peacock Coal	Trinidad	Peacock	"	Las A.
Peerless Coal	Durango	Peerless	"	La Plata
Phillips, H. B.	Palisade	Gearhart	"	Mesa
Pilcher, Oren A.	Mancos	Coal King #2	Same	La Plata
Prendergast & Son	New Castle	Rex	"	Garfield
Rapson Coal	Walsenburg	Rapson #2	"	Las A.
Rasmussen, William	Hesperus	Rasmussen	"	La Plata
Red Ash Coal	Walsenburg	Maitland #1	"	Huerfano

Superintendent	R. R.	Daily Cap.	OPENINGS				SEAM		
			Shaft	Rock	Rock	Drift	Ft.	In.	Pitch % - °
			Depth	Slope	Tunnel				
			Length						
Irvin A. Smith		40				Yes	6		5%
Frank Adamic		50					3	4	6%
Fidel Lobato		10					6	6	2%
Louis Bellotti		25		435			3	8	25%
Louis Bellotti		25					5	3	
Albert Martinez		2					2	4	
Adolph Maschio		15				Yes	7		6%
John Mathews		5					4	4	4½°
Albert W. Newcomb U. P.		550	358				7	11	
Ed Selan		2,000				Yes	6	8	14°
Leo Montoya, Jr.		25				Yes	6		2%
Sam U. Montoya		3				Yes	8		
G. M. Turner	D&RG	175				Yes	4	6	
N. J. Moschetti		20					3	6	5-7%
Willis Davis		50			1,400		7		48°
C. E. Pauley	D&RG	150				Yes	6		
Joseph E. Partch		150				Yes	6		3%
G. A. Hays	D&RG	2,500	STRIP				5-6		
J. F. Lake	D&RG	1,400	STRIP				8		34%
Pete Pantazes		4					2	6	7°
Mack R. Paterson		15					3	6	15%
G. M. Gale		15				Yes	6		2%
Eugene Lopez		25					6		
Everett Bixler		4				Yes	5		
H. B. Phillips		35				Yes	5	3	
Oren A. Pilcher		10				Yes	6	6	
F. L. Prendergast		20				Yes	7	9	52°
James Christy		25		2,200			5		12%
Wm. Rasmussen		15				Yes	5	6	4%
Clarence Clair		75				Yes	3	6	5%

COMPANY	ADDRESS	MINE	ADDRESS	COUNTY
Red Ash Coal	Walsenburg	Maitland #2	Same	Huerfano
Red Glow Coal	Aguilar	Red Glow	"	Las A.
Rex Carbon Fuel	Florence	Rex Carbon	"	Fremont
Roadside Coal	Palisade	Roadside(RiverView)	"	Mesa
Routt Mining Corp.	Oak Creek	Keystone	"	Routt
Rugby Coal	Trinidad	Rugby #6	Same	Huerfano
Silengo Coal	Canon City	Canon Monarch#4	"	Fremont
Smith, A. G.	Gunnison	Baldwin	"	Gunnison
Smith Coal	Trinidad	Berwind #5	"	Las A.
Staples, S. L. , Jr.	Gunnison	Ohio Creek #2	"	Gunnison
Staley, C. & Gordon, C.	Vernal, Utah	White River	Rangley	Rio Blanco
States Coal	Cedaredge	Top	Same	Delta
Strainer Coal	Canon City	Can. Wolf Crk. #2	"	Fremont
Sullivan Coal	Oak Creek	Apex	"	Routt
Sun Coal	Hayden	Sun	"	"
Taylor, Sam	Walsenburg	Taylor	Craig	Moffat
Thompson Crk. C & C Corp.	Denver (3)	Thompson Crk. #1	Carbondale	Pitkin
Thompson Crk. C & C Corp.	" "	" " #2	"	"
Thompson Crk. C & C Corp.	" "	" " #3	"	"
Tolley, C. A. & E.	New Castle	Harvey Gap #3	Same	Garfield
Tomahawk Coal	Delta	Tomahawk	Same	Delta
Twin Pines Coal	Canon City	Twin Pines	"	Fremont
Vento Coal	Florence	Vento	"	"
Victory Coal	Durango	Victory #3	"	La Plata
Vista Coal	Walsenburg	Gordon	"	Huerfano
Wise Hill Coal	Craig	Wise Hill Strip	Same	Moffat
Wright Fuel	Hesperus	Wright #1	"	La Plata
Zellitti, F. , N. , & C.	Durango	Morning Star	"	" "
Zufelt, Robert L.	Hesperus	Burnwell #2	"	" "

Superintendent	R. R.	Daily Cap.	OPENINGS				SEAM		
			Shaft	Rock	Rock	Drift	Ft.	In.	Pitch % - °
			Depth	Slope	Tunnel				
				Length					
Clarence Clair		70				Yes	3	6	5%
Clifford Smith		2				Yes	3	8	7%
Frank Sacchetta		60		300			3	10	12%
Medley Gearhart		30				Yes	6		5%
Carl Steele	D&RG	50					5	10	17%
Mike Nicola		12		150			4		13°
Charles L. Silengo		75				Yes	5	6	10%
A. G. Smith		10				Yes	6		
Frank Smith		8				Yes	6	6	
S. L. Staples, Jr.		10				Yes	5		5%
Raymond C. Gordon		30				Yes	7	10	9°
Welland W. States		60		180			7		4-10%
Anton Strainer, Jr.		30				Yes	6	6	3%
Robert L. Sullivan		12				Yes	4	10	7%
Thomas E. Barton		6				Yes	6	6	15%
Angelo Boscia		10				Yes	10	8	21%
Andrew Allan		500				Yes	7		30°
Andrew Allan		125				Yes	7		30°
Andrew Allan		250				Yes	9		
C. A. Tolley		20				Yes	7		45°
Gene Yellico		30		200			11		4%
Budgie C. Fazzino		45				Yes	5		4%
Tony Vento		100					5	10	
William Gerard		100				Yes	6		
James Ludvik	D&RG	100					4		
Angelo Boscia		100		STRIP			15		
Glen Wright		16				Yes	5		3%
Frank Zellitti, Jr.		20				Yes	5	10	10°
Robert L. Zufelt		6				Yes	6		3°

REPORT OF PRODUCTION

MEN, DAYS, ACCIDENTS - BY COUNTY - BY MINE

COUNTY MINE	COMPANY OR OPERATOR	No. Men Average	Total Days	TONNAGE	ACCIDENTS	
					Fatal	Non-Fat.
<u>DELTA</u>						
Blue Ribbon	Blue Ribbon Coal	4	108	2,590		
Emmons	Emmons Bros Coal	6	226	7,985		
Green Valley #2	Brooks, Ira T.	4	192	7,326	1	1
King	Juanita Coal & Coke	22	111	29,905		1
Red Canon #1	Fogg, Lyndon H.	4	203	4,568		
Tomahawk	Tomahawk Coal	3	123	2,308		
Top	States Coal	3	135	2,362		
TOTALS - 7		46	1,098	57,044	1	2
<u>EL PASO</u>						
Franceville Strip	Franceville Coal	3	146	3,293		
TOTALS - 1		3	146	3,293	-	-
<u>FREMONT</u>						
Annex #2	Annex Coal	3	173	6,794		
Beer Strip	Beer Coal & Constr., Inc.	3	232	29,120		
Black Knight #3	Alvidrez & Sons	2	307	5,675		
Caldirola #2	Caldirola Fuel	4	229	7,686		
Canon Black Diamond	Canon Black Diamond Coal	5	214	20,755		
Canon Liberty #3	Liberty Mining	4	184	6,095		
Canon Monarch #4	Silengo Coal	6	250	20,932		
Canon National	Canon National Coal	6	258	15,168		
Canon Oak Creek	Canon Oak Creek Coal	2	73	292		
Canon Wolf Creek #2	Strainer Coal	8	169	5,959		
Canon Zenith #2	Moschetti, N. J.	4	195	2,771		
Cedar Canon	Cedar Canon Coal	7	243	18,219		

Coal Creek Canon	Coal Creek Canon Mining	5	235	11, 465		
Corley Strip	Corley Company, The	2	60	4, 503		
Double Dick	Double Dick Coal	5	240	7, 502		
Golden Quality #4	Golden Quality Coal	4	238	15, 351		1
Pioneer Canon #2	Corley Company, The	19	225	92, 567		
Rex Carbon	Rex Carbon Fuel	4	189	8, 920		
Twin Pines	Twin Pines Coal	5	261	11, 908		1
Vento	Vento Coal	7	222	17, 672		
TOTALS - 20		105	4, 197	309, 354	-	3
<u>GARFIELD</u>						
Black Raven	Haas, William, Jr.	4	213	3, 212		
Four Mile	Four Mile Coal	2	295	2, 620		
Harvey Gap #3	Tolley, C. A. & Eileen	3	151	1, 714		
New Castle-Vulcan	New Castle Coal	5	234	4, 459		1
New South Canon	Bendetti, H. & L.	3	259	2, 612		
Rex	Prendergast & Son	3	190	1, 541		
TOTALS - 6		20	1, 342	16, 158	-	1
<u>GUNNISON</u>						
Baldwin	Smith, A. G.	3	183	1, 180		3
Bear	Bear Coal	28	152	62, 715		1
Black Beauty	Ellis Coal	7	178	12, 526		
Edwards	North Fork Coal	12	118	15, 600		3
Hawk's Nest	Champion Coal Mining	23	155	27, 338		2
Nu-Mine #2	Nu-Mine Coal	11	231	18, 887		
Ohio Creek #2	Staples, S. L., Jr.	2	242	2, 634		
Somerset	Columbia-Geneva Div., U. S. Steel	98	209	129, 014	2	2
TOTALS - 8		184	1, 468	269, 894	2	11

COUNTY MINE	COMPANY OR OPERATOR	No. Men Average	Total Days	TONNAGE	ACCIDENTS	
					Fatal	Non-Fat.
<u>HUERFANO</u>						
Black Beauty	Black Beauty Coal	4	243	1,536		1
Black Hawk #1	Blue Blaze Coal	2	43	497		1
Calumet #2	Delcarbon Coal	21	144	16,319		3
Gordon	Vista Coal	7	194	8,278		
Maitland #1	Red Ash Coal	6	45	2,074		2
Maitland #2	Red Ash Coal	11	91	5,854		
Major #3	Major Coal	5	72	746		1
Morning Glory	Morning Glory Coal	11	209	12,777		
Pioneer (Clisd.)	Major Coal	3	38	260		
Rugby #6	Rugby Coal	3	79	714		
TOTALS - 10		73	1,158	49,055	-	8
<u>LA PLATA</u>						
Blue Flame	Lobato, Fidel	3	64	390		
Burnwell #1	(Hunt, William M. (3½ mo.)) (Pilcher, Oren A. (7 mo.))	3	210	3,260		1
Burnwell #2	Zufelt, Robert L.	3	56	365		
Coal King #2	Pilcher, Oren A.	2	175	1,032		
Hay Gulch #2	Hay Gulch Coal	1	236	1,403		
Hesperus #4	Hesperus Coal	3	169	2,115		
King	King Coal	4	199	5,688		
Morning Star	Zellitti, F., N., & C.	2	196	2,203		
Peacock	Peacock Coal	3	244	3,253		
Peerless	Peerless Coal	1	16	64		
Rasmussen	Rasmussen, William	2	86	778		
Victory #3	Victory Coal	6	265	11,564		1
Wright #1	Wright Fuel	2	48	656		
TOTALS - 13		35	1,964	32,771	-	2

LAS ANIMAS						
Aguilar- Imperial	Montoya Coal	3	170	1, 710	1	7
Allen	C. F. & I. Corporation	372	230	761, 571		
Anchor #2	Aragon, Ricardo F.	2	60	144		
Baldy #2	Baldy Coal	3	148	818		
Berwind #4	de la Rosa, Lorenzo	3	105	484		
Berwind #5	Smith Coal	3	201	1, 706		
Berwind Canyon	Berwind Canyon Coal	4	39	363		
Bisulco	Bisulco Coal	2	39	202		
Bowman's	Bowman's Coal	2	52	191		
Brodhead #4-A	Brodhead Coal	2	237	1, 462		
Delagua #4	Joe's Coal	4	257	4, 397		1
Engleville	Guadagnoli Brothers	2	173	1, 185		
Grey Creek #4	Grey Creek Coal	5	160	1, 030		
Hastings #3	Maschio Coal	3	185	1, 911		
Martinez	Martinez, Albert	2	65	143		
Montoya #3	Montoya, Ben & Sam	2	10	30		
Peacock	Peacock Coal	4	291	5, 268		
Prosperity #2	Pantazes, Pete	3	231	816		
Rapson #2	Rapson Coal	6	249	6, 018		
Red Glow	Red Glow Coal	1	43	40		
Starkville #4	Iuppa, Albert & Son	9	231	8, 295		
Starkville #7	DiMarco, L. &Alverado, L.	3	23	281		
TOTALS - 22		440	3, 199	798, 065	1	8

COUNTY MINE	COMPANY OR OPERATOR	No. Men Average	Total Days	TONNAGE	ACCIDENTS	
					Fatal	Non-Fat.
<u>MESA</u>						6
Blue Flame	Barstow, Aul & Peterson	3	239	4,844		
Cameo	Kerr Coal	55	229	103,938		
Gearhart	Phillips, H. B.	5	157	3,674		
Go-Boy (Winger)	Fontanari, Rudolph & Alta	4	143	1,873		
Hy-Grade	Paterson, Mack R.	4	128	1,166		
McGinley	Eagle Head Coal	3	178	1,847		
Roadside (River View)	Roadside Coal	4	229	6,872		
TOTALS - 7		78	1,303	124,214	-	6
<u>MOFFAT</u>						
Red Wing	Colowyo Coal	37	149	116,026		2
Taylor	Taylor, Sam	4	70	731		
Wise Hill Strip	Wise Hill Coal	3	50	500		
TOTALS - 3		44	269	117,257	-	2
<u>MONTROSE</u>						
Navajo Strip	Edna Coal	14	215	89,827		1
TOTALS - 1		14	215	89,827	-	1
<u>PITKIN</u>						
Dutch Creek	Mid-Continent Coal & Coke	70	254	383,934	1	2
Thompson Creek #1	Thompson Creek C. & C. Corp.	77	245	117,544		1
Thompson Creek #2	Thompson Creek C. & C. Corp.	18	245	27,698		1
Thompson Creek #3	Thompson Creek C. & C. Corp.	33	245	53,143		13
TOTALS - 4		198	989	582,319	1	23
<u>RIO BLANCO</u>						
Rienau	Jenkins & Mathis Coal	3	231	6,454		
White River	Staley, C. & Gordon, C.	4	171	4,189		
TOTALS - 2		7	402	10,643	-	-

<u>ROUTT</u>							
Apex	Sullivan Coal	4	65	952			2
Babson	Hayden Coal	3	75	1,256			1
Cardinal	Dry Creek Coal	16	181	46,533			1
Edna Strip	Edna Coal (9 months)	38	47	83,304			
	P & M Coal Mining (3 months)	50	40	69,537			
Johnnie's	Mathews, John	2	72	234			
Keystone	Routt Mining Corporation	7	151	4,106			1
Osage Strip (Clstd.)	P & M Coal Mining	34	176	240,333			
Sun (No Report-Est.)	Sun Coal	1	25	100			
TOTALS - 8		155	832	446,355		-	5
<u>WELD</u>							
Boulder Valley #3	Boulder Valley Coal	47	223	127,763			1
Eagle	Imperial Coal	65	223	269,019			2
Imperial	Imperial Coal	19	115	46,452			
Lincoln	Clayton Coal	39	143	102,423			1
Sterling	McNeil Coal Corporation	27	195	84,327			
Washington	Clayton Coal	58	214	164,459			
TOTALS - 6		255	1,113	794,443		-	4
GRAND TOTALS - 118 Mines		1,657	19,695	3,700,692		5	76

COAL SHIPMENT AND DISPOSAL

COUNTY	RAILROAD	TRUCK	POWER &/or HEAT (At Mine)	OUT OF STATE	CHEM. TREATED
Delta	14,345	42,494	205	4,590	18,954
El Paso		3,293			
Fremont	14,438	294,856	60	6,819	6,928
Garfield		16,154	4		2,884
Gunnison	219,456	50,188	250	149,914	46,170
Huerfano	7,824	41,231		13,656	8,352
La Plata	12,220	20,551			1,700
Las Animas	761,219	35,507	1,339	7,099	
Mesa		20,276	*103,938		623
Moffat	99,727	17,530			
Montrose		89,827			
Pitkin	582,319			582,319	
Rio Blanco		10,640	3	1,981	5,476
Routt	402,624	43,684	47	52,444	59,406
Weld	499,671	290,281	4,491		22,703
TOTALS	2,613,843	976,512	110,337	818,822	181,497

*Public Service Power Plant from Cameo, by conveyor - 103874 Tons

SIZES, GRADES, BY COUNTY

MINE RUN	LUMP	EGG	OTHER GRADES	NUT	PEA	SLACK
3,789	12,613	756	1,282	3,618	229	34,757
3,293						
146,661	27,161	6	1,568	9,722	9,618	114,618
40	2,320		154	1,639		12,005
147,901	25,878	26	525	5,571		89,993
949	7,452	10,079	214	5,017	2,987	22,357
20,111	3,982	8	48	515	933	7,174
1,886	5,165	2	639	318	761,897	28,158
399	2,642		206	873	149	119,945
	14,701			21,810		80,746
89,827						
582,319						
	1,167	177		1,317		7,982
5,822	25,326	4,206	23,921	9,055	66,379	311,646
	48,834	94,482		1,943	14,888	634,296
1,002,997	177,241	109,742	28,557	61,398	857,080	1,463,677

MECHANICAL LOADING

COUNTY	Shaker Type	MECHANICAL LOADERS								TONS OF COAL TOTALLY LOADED BY MECHANICAL DEVICES (None or very little hand labor)
		Chain Conveyors		Mainline		Mobile		Power Shovel	Small Portable Conveyors	
		Short Face	Room Length	Belt	Chain	Track	Caterpillar			
Delta	3	1				3	5			42,788
El Paso										
Fremont	21		7		1		19		2	220,783
Garfield		2								
Gunnison	13		1	2			11			266,080
Huerfano	11		7		1					16,319
La Plata	2			1						5,688
Las Animas	3	1		12	3		10			750
Mesa	16								1	105,104
Moffat							4			116,757
Montrose										
Pitkin	22	4	4	6			2			
Rio Blanco	2						2			6,454
Routt	5			1						5,058
Weld	5			2			13			26,486
TOTALS	103	8	19	24	5	3	66		3	812,267

COLORADO - 1961

TONS OF COAL HAND LOADED ONTO MECHANICAL DEVICES	MINING MACHINERY						TOTAL TONNAGE
	Undercutting	Electric Shearing	Combination Undercutting and Electric Shearing	Electric Drills	Compressed Air Drills	Continuous Miners	
	9		2	12			57,044
							3,293
48,917	29		1	39			309,354
	2			13	1		16,158
	28		9	33			269,894
25,306	17			17	2		49,055
13,679	17			11	3		32,771
6,018	11		5	5	12	7	798,065
10,546	21			19	3		124,214
	6			10			117,257
							89,827
198,385				29	8	3	582,319
4,189	4		1	6			10,643
47,889	12		1	15			446,355
	25	1	1	50		14	794,443
354,929	181	1	20	259	29	24	3,700,692

Mined and Loaded by Continuous Mining Machines:

Las Animas County - 761,571
Pitkin County - 383,934
Weld County - 767,957

FATAL ACCIDENTS

Date	Name	Mine	County	Cause	Occupation	Age	Exp.
1-14	L. Chesnik	Somerset	Gunn.	Haulage	Loaderman	39	17
4-6	H. V. Pobirk	Somerset	Gunn.	Fall-roof	Loaderman	33	10
6-14	Frank Gilmore	Dutch Crk.	Pitkin	Rush of water	Cont. Miner	27	7
					Operator		
6-21	George Satak	Allen	Las A.	Machinery	Rollerman	50	17
12-7	Ira T. Brooks	Green Val.	Delta	Haulage	Operator	63	45
NOT CHARGED TO THE INDUSTRY							
8-13	Frank Perko	Allen	Las A.	Heart Failure	Mechanic	48	27

FIVE-YEAR COMPARISON

<u>NON-FATALS</u>						<u>FATALS</u>				
1957	1958	1959	1960	1961	Causes of Injury	1957	1958	1959	1960	1961
9	9	12	15	11	Falls of roof	1	2		1	1
7	2	6	8	7	Fall of face or rib					
8	12	7	6	13	Falling objects					
5	4	4	9	7	Falls of persons	1				
8	11	7	13	17	Handling materials					
5	6	2	5	1	Hand tools					
1	3	1	3	1	Striking vs objects					
15	15	9	12	2	Haulage				1	2
				1	Explosion of gas					
1	1	3	1	1	Explosives					
	1	1		2	Electricity					
14	17	9	4	6	Machinery					2
2	4	2		7	Jack pipes					
1			1		R. R. cars					
			1		Others					
76	85	*63	78	76	TOTALS	0	2	2	2	5

*Correction

ACCIDENT STATISTICS

	<u>Fatalities</u>		<u>Non-Fatals</u>	
	1961	1960	1961	1960
Fatalities	5	2		
Non-Fatals/Compensable			76	78
Per 1,000 employed	3.02	0.98	45.86	38.03
Men employed per injury	351	1,026	21.80	26.29
Tonnage per injury	740,138	1,812,286	48,693	46,469
Per million tons	1.35	0.552	20.53	21.52
Dependents:				
Widows	5	2		
Children	10	5		

COAL PRODUCTION FROM 1864 THROUGH 1961

<u>Year</u>	<u>Tonnage</u>	<u>Year</u>	<u>Tonnage</u>	<u>Year</u>	<u>Tonnage</u>
1864	500	1897	3,565,660	1930	8,238,094
1865	1,200	1898	4,174,037	1931	6,604,063
1866	6,400	1899	4,826,939	1932	6,616,525
1867	17,000	1900	5,495,734	1933	5,284,872
1868	10,500	1901	6,021,405	1934	5,251,003
1869	8,000	1902	7,522,923	1935	5,953,601
1870	4,500	1903	7,775,302	1936	6,868,801
1871	15,600	1904	6,776,551	1937	7,222,092
1872	68,540	1905	8,989,631	1938	5,730,291
1873	69,997	1906	10,308,421	1939	6,002,125
1874	77,372	1907	10,965,640	1940	6,673,359
1875	95,838	1908	9,773,007	1941	7,008,037
1876	117,666	1909	10,722,490	1942	8,131,764
1877	160,000	1910	12,104,887	1943	8,372,683
1878	200,630	1911	10,197,595	1944	8,202,401
1879	322,732	1912	11,016,948	1945	7,656,612
1880	375,000	1913	9,268,939	1946	5,928,823
1881	706,744	1914	8,201,423	1947	6,381,016
1882	1,161,479	1915	8,715,397	1948	5,682,512
1883	1,220,593	1916	10,522,185	1949	4,578,170
1884	1,130,024	1917	12,515,305	1950	4,274,887
1885	1,398,796	1918	12,658,055	1951	4,111,945
1886	1,436,211	1919	10,406,543	1952	3,643,523
1887	1,791,735	1920	12,514,693	1953	3,598,867
1888	2,185,477	1921	9,141,947	1954	2,922,365
1889	2,400,629	1922	10,003,610	1955	3,366,490
1890	3,075,781	1923	10,336,735	1956	3,303,661
1891	3,512,632	1924	10,501,088	1957	3,324,787
1892	3,771,234	1925	10,440,387	1958	2,972,191
1893	3,947,056	1926	10,616,760	1959	3,293,686
1894	3,021,028	1927	9,781,580	1960	3,624,572
1895	3,339,495	1928	9,921,585	1961	3,700,692
1896	3,371,633	1929	9,934,064		







